

Translation

PATENT COOPERATION TREATY

PCT/EP2003/014029



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference SCG5205PEPWO	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/EP2003/014029	International filing date ( <i>day/month/year</i> ) 08 December 2003 (08.12.2003)	Priority date ( <i>day/month/year</i> ) 18 December 2002 (18.12.2002)
International Patent Classification (IPC) or national classification and IPC B32B 17/10		
Applicant SCHEUTEN GLASGROEP		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>9</u> sheets, including this cover sheet.  <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  These annexes consist of a total of <u>4</u> sheets.
3. This report contains indications relating to the following items:  I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input checked="" type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 14 July 2004 (14.07.2004)	Date of completion of this report 09 May 2005 (09.05.2005)
Name and mailing address of the IPEA/EP  Facsimile No.	Authorized officer  Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/EP 2003/014029

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

- ☐ the international application as originally filed
- ☒ the description:  
pages 1-44, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, as amended (together with any statement under Article 19  
pages \_\_\_\_\_, filed with the demand  
pages 1-21, filed with the letter of 23 March 2005 (23.03.2005)
- ☐ the drawings:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages \_\_\_\_\_, as originally filed  
pages \_\_\_\_\_, filed with the demand  
pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/fig \_\_\_\_\_

5. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

International application No.

PCT/EP003/014029

**IV. Lack of unity of invention**

1. In response to the invitation to restrict or pay additional fees the applicant has:

- ☒ restricted the claims.
- ☐ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

- ☒ complied with.
- ☐ not complied with for the following reasons:

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- ☒ all parts.
- ☐ the parts relating to claims Nos. \_\_\_\_\_

## I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

The amendments submitted with the letter of 23 March 2005 introduce subject matter which, contrary to the requirement of PCT Article 34(2)(b), goes beyond the disclosure in the international application as filed. The amendments in question are as follows:

Claim 7: In terms of its wording the newly filed claim 7 corresponds essentially to the original independent claim 8, but it is now formulated as a dependent claim ("*according to any one of claims 1 to 3*"). No basis for such a combination was found in the application as originally filed. The current description (page 5, line 24 to page 6, line 2; page 6, lines 18 to 24) presents the subject matter of the new claim 7 as an alternative solution to the subject matter of claim 1.

Claim 9: The newly filed claim 9 corresponds in part to the original independent claim 9, but is now formulated as a dependent claim ("*according to claim 1*"). Consequently, what is now claimed is a "*fire protection means according to claim 1 ... comprising a silicate-based fire protection film*" instead of a "*silicate-based fire protection film*". Also, the values given for the molar modulus are now "3.33 and 5.34" instead of "2.0 and 6.5". The new values are found in the description (page 3, line 9 and page 15, line 9), where they are only disclosed for very specific compositions. The generalisation in the newly filed claim 9 is inadmissible.

Claims 10-12: The newly filed claims 10 to 12 are now also formulated as dependent claims ("*according to*

## I. Basis of the report

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claim 1" or "according to claim 10"). Again, no basis was found for this formulation in the application as originally filed that might justify such a dependency. It is not clear that the fire protection films referred to in line 22 on page 18 are part of the fire protection means according to claim 1. The amendment is therefore inadmissible.

Claims 13-17: According to the applicant, the newly filed claims 13 to 17 are based on the original claim 15. Claims 13 to 17 are formulated as dependent claims with a back-reference to claim 1, whereas the original claim 15 contained no such back-reference ("according to either of claims 8 and 13"). Irrespective of the amended back-reference, the newly filed claims 13 to 17 are considered inadmissible for the following reasons:

- (a) The term "intumescent material" is used instead of "at least one of the films/film layers".
- (b) The figures for the residual moisture levels have been deliberately changed and removed from the tables on pages 36, 37, 40 and 42. In the tables the figures were given only for very specific compositions. The generalisation that has been made is inadmissible.

Thus the amendments are inadmissible.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. Statement**

Novelty (N)	Claims	1-6, 8, 18-21	YES
	Claims		NO
Inventive step (IS)	Claims	1-6, 8, 18-21	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-6, 8, 18-21	YES
	Claims		NO

**2. Citations and explanations**

Reference is made to the following documents:

D1: US 2002/056713  
D2: EP-A-0 492 977  
D3: US-A-5 681 640  
D4: DE 100 30 239  
D5: US 2001/049025  
D6: DE 199 16 506 C  
D7: DE 37 40 330  
D8: WO 01/70495  
D9: US-B1-6 379 825  
D10: WO 01/10638  
D11: DE 41 20 562  
D12: US-A-4 676 998  
D13: DE 195 43 148  
D14: DE 41 35 678  
D15: US-A-5 523 338

**1. Inventive step**

The application fails to meet the requirement of PCT Article 33(1) because the subject matter of claims 1 to 6, 8 and 18 to 21 does not involve an inventive step (PCT Article 33(3)).

1.1 Document D8, which is considered to be the prior art closest to the subject matter of claim 1, discloses (see page 5,

lines 12 to 17, and claims 1, 2, 10 and 16) fire resistant glass laminates. For the production of these laminates a solution of alkali metal silicate and an organic compound (e.g. glycerol) in water is applied to a flat surface. After drying the resulting film is removed from the surface and placed between two sheets of glass.

The subject matter of claim 1 differs from that of D8 in that there appears to be a **coated** film. Claim 1 does not use the term "polymer film", and so a polymer film cannot be part of the distinguishing feature.

It is not clear what technical effect is associated with this difference. The problem addressed by the present invention must therefore be seen as that of providing new film systems. It is noted that the object of the invention as specified in the application (i.e. to provide a fire protection means that is easy to store, transport and laminate) is unacceptable because the assertion is not confirmed by comparative tests with the closest prior art.

Coated films are well known systems. Attention is drawn to document D15, in which synthetic hectorite is used as a coating material.

The solution proposed in claim 1 of the present application cannot therefore be considered inventive (PCT Article 33(3)).

- 1.2 Claims 2 to 6, 8 and 18 to 21 do not contain any features that meet the PCT requirements in respect of inventive step when combined with the features of any of the back-referenced claims (see documents D1 to D7 and D9 to D14, and the passages cited in the search report).

## 2. Final observations

- 2.1 The term "hybrid film system" in claims 1 and 16 is vague and unclear, and leaves the reader uncertain about the meaning of

the technical feature referred to. The claimed subject matter is therefore not clearly defined (PCT Article 6).

- 2.2 It would appear from the description (page 7) and the examples that the following feature is essential to the definition of the invention:

"at least one component of the film system is silicate-based"

Independent claim 1 does not include this feature and therefore fails to meet the requirement of PCT Article 6 in conjunction with PCT Rule 6.3(b), according to which an independent claim must include all the technical features that are essential to the definition of the invention.

The argument that it is unimportant to the invention whether the material used for coating is silicate-based is unacceptable because all the exemplary embodiments described in the application use a silicate material, and no reference is made to alternative materials.